

## CLAIMS

## WHAT IS CLAIMED IS:

1. A folding bicycle comprising: a frame (1) of known geometry of the front wheel angle, the wheelbase and the distance between the cranks, the seat and the handlebar, the fork (4), which is attached to the frame (1) at the bearing (5), the front wheel (3), the rear wheel (18), the handlebar (36), the transmission, the brake assembly, the seat, and other accessories, such as the lights, the bell, the mudguards, the carrier, the stand etc., is defined by the following: in the riding mode, the fork blades (6) of the fork (4) are bent forwards. On the fork blades (6), there are two backwards-pointing pivotable swing-arms (7), which hold the front wheel (3) in such a way that its position remains the same as in a usual bicycle and can be adjusted to riding preferences. The swing-arms (7) are connected by a stirrup (8), which encloses the wheel (3). Its top is pressed against the joint (9) of the front fork (4) under the bearing (5). The front wheel (3) can be pivoted forwards by approx. 180 degrees, and the fork can be turned by 180 degrees as well. By doing so, the front wheel (3) is partially placed into the gap between the double down tubes (2) of the frame (1). The rear wheel (18) is mounted to the chain stays (17), which can be folded around the pivot (19), placed on the frame (1) near the chainring (15). The pivot (19) is equipped with a bearing assembly (21) with a shaft (22), holding two coaxial sprockets (23, 24). By the front chain (25), the sprocket (23) is connected to the chainring (15) and the cranks (16). By the rear chain (31), the sprocket (24) is connected to the sprocket (32) on the rear wheel (18)

2. The folding bicycle, according to the requirement 1, is defined by: the swing arms (7) rest on the end parts (13) and are bound by the springs (14), which are attached to the fork blades (6).

3. The folding bicycle, according to the requirement 1, is defined by: the end parts (13) can be replaced by the shock absorbers (14'), preferably the elastomer type, or the hydraulic or pneumatic type.

4. The folding bicycle, according to the requirements 1 to 3, is defined by: the frame (1) has a double down tube (2) with a gap (2'), which is approximately the same or wider than the width of the front wheel (3).

5. The folding bicycle, according to the requirements 1 to 4, is defined by: the transmission from the cranks (16) to the rear wheel (18) is done by two drivebelt assemblies with a double pulley on the middle shaft (19).

6. The folding bicycle, according to the requirement 1, is defined by: the chain stays (17) are foldable around the pivot (19) and are equipped with a locking device, preferably a pin. They can also be equipped with a shock absorber and/or spring.

7. The folding bicycle, according to the requirements 1 to 6, is defined by: both wheels are of smaller size, preferably around 16".

8. The folding bicycle, according to the requirements 1 to 7, is defined by: the handlebar (34) is foldable. The middle part, which is attached to the bearing assembly in the head tube (35), can be folded backwards and downward, while each side (36) can be folded towards the frame (1), so that the handles (37) are right next to the frame (1).

9. The folding bicycle, according to the requirements 1 to 8, is defined by: the frame (1) can be equipped with an electric or internal combustion motor.

10. The folding bicycle, according to the requirements 1 to 9, is defined by: behind the seat, the frame (1) is fitted with a second seat support (38).